

September 26, 1991

TO: Hal Munson  
FROM: Jim Ronkainen JR

SUBJECT: September Monthly Report

M/700 SS

Receivers for design acceptance testing have been held up in the receiver shop because of problems tapping the sight holes. Mike Keeney has ordered new taps that should help with this problem. At Skip Smith's suggestion, I have ordered 100 polypropylene (PP) stocks from Lee Six made in the current mold. We will use these stocks to evaluate the inletting to see if it is necessary to alter the slides in the mold. Not altering the slides will save approximately \$11,000. Components for a stainless steel M/700 were provided to the Custom Shop for their M/700 KS Stainless Mountain Rifle catalog gun. The receiver for this gun was shot blasted before heat treat and seemed to give a better finish match from barrel to receiver than on previous guns. Two M/700 SS in 25-06 are being built for Neil Oldridge and Ron Shearer for a hunt they scheduled out West. The guns will be ready by the middle of next week. They will also have the receiver shot blasted before heat treat.

Glen Sietsema is still analyzing the results of the first barrel upsetting trial. Specifications for the stainless steel must be completed soon to ensure smooth flow of the correct material continues. Another barrel upsetting trial will be scheduled for next week for the no finish turn (NFT) barrels. These barrels will be run completely through the line and will be the first barrels produced using the proposed process. Discussions with Lee Six will begin soon to add checkering to his mold for our production stocks.

M/870 Feed Latches

The first sample right hand feed latches for the M/870 12 gauge were received early this month. The parts had been delayed while Connecticut Spring debugged their tooling and process to fix several deficiencies Rick Lewis and I found with the initial parts. The form of the parts from CT Spring looks much better than we have gotten from parts made on the four slide. Dimensionally, the tolerances have been much tighter on the stamped parts than the fourslide parts. We still have not received the first samples for the left hand feed latch from Connecticut Spring. We cannot accept the tooling or the parts until we have 100 samples of each latch so they can be tested as pairs.

M/700 VS

Fred Martin and I visited H-S Precision early this month to accept the tooling for the M/700 VS stocks. The stocks, made from a new mold, did not show the problem with the barrel laying off to one side of the barrel groove that we had seen on previous stocks. The gap between the barrel and the stock is larger than on our other rifles, but it is not objectionable because the barrel groove and barrel are both flat black. The barrels are free floated. The paint finish on the stock was also smoother than on the previous samples. We shot accuracy with the stocks using two barreled actions we brought with us and match ammunition provided by Lonoke. The guns both met our accuracy specifications. The 22-250 we had shot just over 1/4 MOA for 5 shots!

Final gauging for the stocks has been held up in the toolroom and is starting to impact production. Tom Houghton is interested in buying match ammunition from us for his accuracy testing.

ECM Rifling

I visited CATION with Matt Golemboski and Mike Keeney to review the feasibility of using ECM rifling for our current rifle barrels. ECM rifling allows much flexibility in terms of rifling form and twist rate, but the one major question is disposal the by-products of the rifling process. The "chips" from this process are metal hydroxides that must be disposed of as hazardous waste. Careful consideration must be given to dealing with the waste issues of the ECM process before we invest in this process as a replacement for current rifling process.

M/700 Detachable Magazine Box

Fred Martin and I visited EMT to discuss the new detachable magazine box design with Joe Marconi and Mike Werner. We agreed to finish detailing the drawings for the box and to work with them to improve the manufacturability of the design for stamping. We are going to meet with Frank Ogrodnik to discuss the feasibility of making the trigger guard and bow from MIM. We will review the latch design with shooters/hunters in the department to get their comments on the design.